REMARKS

In this response, certain claims have been amended as indicated above, and no claims have been added or canceled. Thus, claims 1-32, 34-63, and 65-111 remain pending in this application. The Office Action issued by the Examiner has been carefully considered.

Applicant is grateful to the Examiner for the indication of allowability of certain claims.

Applicant understands all pending claims to have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims in U.S. patent nos. 7,020,701; 6,826,607; and 6,832,251.

Applicant includes a Terminal Disclaimer with this response directed to the patents cited by the Examiner above. Applicant accordingly requests that these double patenting rejections be withdrawn.

Claims 1-3, 11-12, 14, 16, 18, 21, 28-29, 32, 33, 36, 42-44, 46-47, 50-53, 56-61, 80-83, 92, and 94-111 have been rejected under 35 U.S.C. 102(e) as being anticipated by Clare et al. (US Patent No. 6,414,955) (hereinafter Clare).

As mentioned in Applicant's prior response, Applicant emphasizes that the overall specification provided by Clare is directed to a method for learning the topology of a wireless network (col. 3: lines 35-37). Clare does not discuss any details regarding the distribution of data processing to nodes in the network that have already become members of the network. Rather, Clare only discusses communication scheduling and routing processing associated with learning the topology of the network and adding new nodes to the network. This emphasis is not surprising given the focus of Clare on topology learning. For example, Clare's "Summary of the Invention" immediately states that this "invention provides a more efficient topology learning procedure". The entire Summary (i.e., the cols. 4 and 5 referred to by the Examiner in rebuttal) is dedicated solely to teaching about topology learning and the addition of new nodes to the network.

The Examiner has noted that once a new node is a member of the network, it may issue invitations to other new nodes (Clare col. 5: lines 1-2), and the Examiner argues that such a new node has been "self-assembled" prior to issuing the invitation to another new node. Rather than argue the existing language of the claim, Applicant has elected to make clarifying amendments. Applicant does not necessarily believe these amendments to be narrowing, but makes them to better clarify Applicant's response below.

Applicant has amended independent claim 1 to recite that "data processing other than processing for topology learning or the addition of one or more new nodes to the sensor network is distributed through the sensor network." Any data processing distributed to add a new node as described by the Examiner would be for the addition of a new node to the sensor network. Data processing as recited by Applicant's claim 1 is clearly not taught or suggested by Clare, and accordingly, Applicant requests the withdrawal of this rejection.

Applicant's independent claims 80 and 83 have also been amended similarly as to claim 1 above. Further, it should be noted that claim 80 recites the node information is provided "to one or more other nodes . . . in response to at least one parameter of a signal received from the at least one environment". The Examiner's arguments regarding distributing of information for the addition of a new node to a network do not show a signal received from the environment or how node information is provided to other nodes in response to any such signal. Instead, the Examiner's arguments are restricted to information flowing within the network. Thus, claim 80 is believed allowable.

Moreover, claim 83 as amended recites "collecting sensor data from the environment" and "means for distributing processing of the collected sensor data". Applicant does not believe that Clare shows these features. Accordingly, claim 83 is also believed allowable.

Applicant's independent claim 92 recites that "data gathered from the monitored environment by the at least one sensor is processed and a predetermined identifying code representing the gathered data is propagated through the network" (emphasis added). As mentioned above, Clare is focused on a method of topology learning for a network, and there is

little discussion of processing of data that is gathered by sensors. Where such processing is discussed, Clare describes the local processing (e.g., using a DSP) of the data on the node at which such data was collected. Clare does not teach or suggest that any code representing the data be propagated through the network. Accordingly, claim 92 is believed allowable.

Applicant's independent claim 95 recites that "data gathered from the monitored environment by the at least one sensor is processed to reach a decision at the at least one node, and a summary message corresponding to the decision is forwarded through the network" (emphasis added). As discussed above, Clare focuses on topology learning and self-assembly and only briefly discusses processing of sensor data locally on the gathering node. The Examiner has not discussed how Clare shows sensor data that is gathered and used to reach a decision as recited. Thus, it is believed that claim 95 is allowable for the foregoing recitations.

Applicant's independent claim 97 recites that "the network automatically re-routes around any node communication failure that occurs when remotely controlling a function of at least one of the plurality of network elements, wherein the node communication failure occurs in one or more nodes that are each a member of the network prior to the node communication failure" (emphasis added). Clare is focused on methods and processing prior to the completion of self-assembly as discussed above. Clare does not teach automatic re-routing that occurs after a node communication failure for a node that has previously become a member of the network. Clare further does not talk about any such re-routing when remotely controlling a function of the network. Accordingly, claim 97 is believed allowable for at least this reason.

Applicant's independent claim 101 recites that "code and data anticipated for future use are predistributed through the sensor network using low priority messages." With regard to similar claim language for the Examiner's rejection of dependent claim 15 below, the Examiner has stated that Clare does not disclose distributing code and data anticipated for future use through the sensor network using low priority messages. Therefore, claim 101 is believed allowable as not being anticipated by Clare.

Applicant's independent claim 103 recites that "the at least one node controls data processing and data transmission in response to a decision probability of a detected event." With regard to the rejection of claim 28, which has similar language, the Examiner references Clare (col. 15: lines 10-15) as teaching the foregoing recitation. However, this section of Clare only describes the starting of certain processing on nodes in the network, such as sensing of activity in the environment or implementing instructions from a user (col. 15: lines 12-24). Clare does not teach or suggest a probability of a detected event, or the controlling of data processing and data transmission in response to this probability. Therefore, claim 103 is believed allowable for this reason.

Applicant's independent claim 106 recites that "the plurality of network elements are self-assembled into a multi-cluster network, wherein a start node is selected as a base node, and wherein the base node communicates an assembly packet throughout the network" (emphasis added). Clare does not teach or even suggest self-assembly of a wireless network wherein a base node communicates an assembly packet throughout the network as recited by Applicant. Claim 106 is believed allowable for at least this reason.

Claims 30, 45, and 55 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Clare in view of Official Notice.

Applicant's claims 30, 45, and 55 each depend, directly or indirectly, from independent claim 1, and are believed allowable for the reasons discussed above.

Claims 4-10, 13, 17, 19, 25, 38-41, 48-49, 62-79, 84-85, and 90 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Clare in view of Myer et al. (US Patent No. 6,615,088) (hereinafter Myer).

Applicant's independent claim 63 has been similarly amended as for claim 1 and is believed allowable for the reasons discussed above.

Applicant's independent claim 84 recites that "a plurality of levels of synchronization are supported among different subsets of the plurality of network elements" (emphasis added). As

the Examiner has stated, Clare does not disclose such supporting a plurality of levels of synchronization.

The Examiner argues that Myer teaches "levels of synchronization" and that this phrase should be given broad interpretation. Specifically, the Examiner argues that Myer shows polling of devices with differing polling periods. However, the above recitation of claim 84 requires that these levels of synchronization are "supported among different subsets" of the network elements. The mere fact of varying time periods of polling does not teach or suggest supporting synchronization among different subsets. "Subsets" here cannot be shown merely by varying time periods. In order to make a prima facie case, it is necessary to show some nexus between various subsets of network elements and synchronization. This is not shown by Myer. Instead, Myer only teaches that controller 36 is managing communications with several devices controlled by controller 36 and that the communications conflicts are prevented due to polling by controller 36. There is no suggestion that synchronization among subsets of devices is supported.

Applicant's independent claim 85 recites that "data is transferred using message packets, and wherein the message packets are aggregated into compact forms in the at least one node." The Examiner has stated that Clare does not disclose aggregating data processed in a plurality of nodes for further processing by other nodes. The Examiner refers again to the same section of Myer describing polling as discussed above for claim 84. Myer does not teach or suggest any aggregation of message packets into compact forms by its description of polling. Instead, Myer merely describes obtaining the status of several devices—compacting or aggregation of this status information is not discussed by Myer.

Claims 15, 54, 101, and 102 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Clare in view of Davis et al. (US Patent No. 5,742,829) (hereinafter Davis).

Applicant's dependent claim 15, which depends from independent claim 1 discussed above, recites that "code and data anticipated for future use are predistributed through the sensor

network using low priority messages." The Examiner has stated that Clare does not disclose distributing code and data anticipated for future use through the sensor network using low priority messages. The Examiner argues that Davis discloses a network that distributes code and data in the background. However, Davis is solely focused on the automatic installation of software (e.g., providing of updates for new versions of an installed program) (see col. 2: lines 31).

Applicant's claim 15 recites "data anticipated for future use." But Davis does not discuss the predistributing of any data, and further does not suggest distributing "data anticipated for future use" since the sole focus and motivation of Davis is to ensure that software code is kept up-to-date. Further, Davis does not discuss a sensor network, so any data distributed would not correspond to future use in a sensor network.

Similarly to claim 15, Applicant's independent claim 101 also recites that "code and data anticipated for future use are predistributed through the sensor network using low priority messages." For similar reasons as discussed above for claim 15, claim 101 is believed allowable.

Claims 19, 20, and 31 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Clare in view of Makansi et al. (US 2002/0154631) (hereinafter Makansi). Claim 91 has been rejected for similar reasons.

Applicant's claims 19, 20, and 31 each depend, directly or indirectly, from independent claim 1, and are believed allowable for the reasons discussed above. Applicant's claim 91 depends directly from independent claim 85, and is believed allowable for the reasons discussed above.

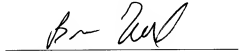
Claims 9, 22-24, 27, and 37 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Clare in view of Humpleman et al. (US Patent No. 6,546,419) (hereinafter Humpleman).

Applicant's claims 9, 22-24, 27, and 37 each depend, directly or indirectly, from independent claim 1, and are believed allowable for the reasons discussed above.

It is respectfully submitted that the Examiner's rejections have been successfully traversed and that the application is now in order for allowance. Applicant believes that any of the Examiner's other arguments not discussed above are moot in light of the above arguments, but reserves the later right to address these arguments. Applicant also incorporates by reference the arguments made in Applicant's prior response of September 26, 2006. Accordingly, reconsideration of the application and allowance thereof is courteously solicited.

Any dependent claims not already discussed above are believed allowable for at least the reasons discussed above with respect to the independent claims from which such claims directly or indirectly depend. If it is helpful to advance prosecution of this application, Applicant's representative welcomes a telephone call at the number below to discuss this response.

Respectfully submitted,



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